DME Training – Mental Health in Civil Aviation

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Dy Chairman, CAMB - CAAS
Atlantic City, 27 April 2016
Disclosure

• I have no financial interests that are related to this presentation.

• I am not a Psychiatrist.
Scope

• Background
• The focus on mental health
• Implementing competency-based training
• Conclusion
Background

- Jointly offer an Aviation Medicine course for Medical Examiners
Background

- ICAO convened 3\textsuperscript{rd} Medical Provisions Study Group (MPSG) – 27 April to 1 May 2009
- To harmonise training programmes to ensure that internationally agreed competency standards are met
- Adopted competency-based approach in DME training
- Competency framework for DME training published in Manual of Civil Aviation Medicine in 2012
Background

• Developed a new competency-based course to replace the former course
• Launched in 2013

“IAASM-SAA Aviation Medicine for Medical Examiners and Assessors (Competency-based)”
Background

2016 revision – for accreditation by ICAO as a Compliant Training Package

“IAASM-SAA Post-graduate Certificate in Aviation Medicine for Medical Examiners and Assessors (ICAO Compliant Training Package)”
• The focus on mental health...
Focus on mental health

3rd MPSG – Guiding Principles:
1. Physical incapacitation is a rare cause of accidents in two-pilot aircraft undertaking commercial flight operations
2. Overall incidences of physical disease increases significantly with age
3. In many States, the incidence of mental health problems, such as depression and problematic use of psychoactive substances, is increasing whilst cardiovascular disease is declining
4. For some conditions, preventative strategies have been demonstrated to be effective in the general population, eg. depression, alcohol misuse
5. The current periodic medical examination does not formally address mental health or behavioural problems associated with ill health to the same extent as the detection of physical disease
6. The periodic physical examination, like all medical examinations, benefits from a thorough history
7. Current life events can adversely affect the performance of licence holders
Focus on mental health

- 3rd MPSG – Aims of the examination process:

I. Determination of incapacitation risk
II. Assessment of relevant functional capacities
III. Assessment of conditions which may deteriorate due to flight environment
IV. Assessment of conditions which may be aggravated by work environment in long term
V. Provision of health and preventive medicine advice
VI. Assessment of conditions that may cause unsafe behaviour
Focus on mental health

Perhaps the most important areas of the examination relate to behaviour. An important competency in this regard is the evaluation of psychiatric and psychosocial factors. This phrase may appear to confuse different elements, but is chosen deliberately. A full psychiatric examination would not normally be conducted by an aviation medical examiner: it should, however, be normal in the course of an assessment to undertake some empirical evaluation of the features of psychiatric illness including behaviour, appearance, orientation, memory, form and content of thought, mood and affect/emotion.

Similarly, although time precludes a full psychological evaluation, it would be valuable for medical examiners to gain some degree of insight into the psychological milieu and social circumstances of the applicant, in a discussion of such areas as domestic/family situation and work stresses, which is referred to in 1.2.2 above. It could be argued that this is at least as important as many other parts of the traditional physical examination. Many of the conditions which could be contributory to an accident are not major medical problems but situational i.e. dependent on the current circumstances in which an individual finds himself. Current life events or concerns such as relationship worries, domestic strife, family stress, financial difficulty, work challenges (including fatigue), or workplace conflict (or even positive events such as marriage, new baby or promotion) have potential to cause preoccupation and distraction in pilots or air traffic controllers and may thus have a significant impact on flight safety, even if they do not constitute a medical condition or diagnosis. The DME is well placed to identify such situations and discuss them with the applicant to ensure that adequate professional support is provided, whether non-medical or medical, and also that good judgement is exercised by the applicant as to temporarily avoiding flying where appropriate. Further guidance concerning mental health and behavioural issues can be found in Part I, Chapter 2 and Part III, Chapter 9.
• Implementing competency-based training for DMEs
Competency-based training

• So, how to go about it?
  – What constitutes a competency-based mental health package for training of DMEs?
  – How to structure and fit into course framework?
  – How training can be conducted?
Competency-based training

Inculcate competency; not teach Psychiatry
A wide range of agents can cause organic disturbances of the brain. The resultant symptoms depend on the causal agent, the part(s) of the brain affected, the previous health of the brain, and the current environment of the person.

The causal agent may be external (alcohol, drugs, medication, injury, etc.) or internal (tumours, endocrine disorders, degeneration, etc.). An organic mental disorder may present with a wide array of psychiatric...
Skills

• Communication
  – Building rapport
  – Establish trust
  – Chat
  – Observe & Explore
  – Handling difficult situations

• Identify stressors/issues/signs

• When and how to deploy screening tool
A Attitude

- “Too difficult”
- “Too time consuming”
- “It’s ineffective”
- “It’s pointless”
- “I don’t know what to do”
- “I’d rather not know”
Putting it together

- Lectures
- Videos critique (communication)
- Case discussions
- Instructors role-playing
Areal-life tragedy did the work

- "Too difficult"
- "Too time consuming"
- "It's ineffective"
- "It's pointless"
- "I don't know what to do"
- "I'd rather not know"
Competency-based training

### COMPETENCY-BASED AVIATION MEDICINE COURSE FOR MEDICAL EXAMINERS

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<thead>
<tr>
<th>M1</th>
<th>M2</th>
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<td>RISK-BASED AEROMEDICAL EVALUATION</td>
<td>OPERATIONAL AVIATION MEDICINE</td>
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- **M2.1** Facilitating Communication
- **M2.2** Systematic and Targeted Clinical Examination
- **M2.3** Eye Examination and Assessment of Visual Functions
- **M2.4** ENT Examination and Functional Assessment
- **M2.5** Mental Health Evaluation in Aviation (1)
- **M2.6** Mental Health Evaluation in Aviation (2)

#### M2.6

**Mental Health Evaluation in Aviation (2)**

- M2.6.1 Stress and Anxiety Disorders
- M2.6.2 Mood Disorders
- M2.6.3 Personality Disorders
- M2.6.4 Alcoholism and Substance Abuse
Competency-based training

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Conclusion

• The 3rd MPSG was an important milestone that had brought focus onto mental health issues
• Competency-based approach offers a systematic and effective way to train DME
• The GermanWings tragedy has shifted the component amongst DMEs, making them more receptive
Thank you.